

PATENT APPLLICATION Attorney's Do. No. 8075-020

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

EXPRESS MAIL

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DATE OF DEPOSIT: JUNE 30, 2004

I HEREBY CERTIFY THAT THIS PAPER AND ENCLOSURES AND/OR FEE ARE BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE UNDER 37 CFR 1.10 ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO: MAIL STOP PETITION, COMMISSIONER FOR PATENTS, P.O. BOX 1450,

ALEXANDRIA, VIRGINIA 22313-1450 HILLARY DIXON

(SENDER'S PRINTED NAME)

SIGNATURE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. patent application:

BRENT LEBACK ET AL

Serial No. 09/174,057

Group Art Unit: 2782

Filed:

October 16, 1998

Examiner: H. Kim

For:

A TIGHTLY COUPLED AND SCALABLE MEMORY

AND EXECUTION UNIT ARCHITECTURE

Mail Stop Petition Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

TRANSMITTAL LETTER

Enclosed are the following:

1. Petition for Revival of an Application for Patent Abandoned Unintentionally Under 37 CFR 1.137(b).

Assignee claims small entity status. See 37 CFR 1.27

- Form PTO 85B
- 3. Petition fee (small entity) (37 CFR 1.17(m): \$665

- 4. Issue fee: \$665
- 5. 42 sheets of formal drawings
- 6. Power of Attorney
- 7. Copy of Sheriff's Certificate of Sale of Personal Property recorded in Reel/Frame 013887/0798 (2 pages), on August 21, 2003
- 8. PTO Form 2038 authorizing credit card payment for the above-listed fees is enclosed (\$1,330). Any deficiency or overpayment should be charged or credited to deposit account number 13-1703.

Customer No.

Respectfully submitted,

20575

PATENT TRADEMARK OFFICE

MARGER JOHNSON & McCOLLOM, P.C.

By

Alexander C. Johnson, Jf.

Reg. No. 29,396

1030 S.W. Morrison Street Portland, Oregon 97205 Telephone: (503) 222-3613



PATENT APPLICATION Attorney's Docket No. 8075-020

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: BRENT LEBACK ET AL

U.S. Serial No. 09/174,057

Group Art Unit 2782

Filed: October 16, 1998

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For:

TIGHTLY COUPLED AND SCALABLE MEMORY AND

EXECUTION UNIT ARCHITECTURE

Mail Stop Petition Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)

The above-identified application became abandoned for failure to timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the Office notice or action plus any extensions of time actually obtained.

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

1. / PETITION FEE:

Assignee claims small entity status. See 37 CFR 1.27

Small entity fee (37 CFR 1.17(m)): \$665

2. REPLY AND/OR FEE:

Enclosed are:

- a. 42 sheets of formal drawings
- b. Form PTO 85b
- c. issue fee of \$665

3. TERMINAL DISCLAIMER WITH FEE:

Since this utility patent was filed on or after June 8, 1995, no terminal disclaimer is required. However, if such a disclaimer is required, assignee will submit same.

4. STATEMENT

MARGER JOHNSON & MCCOLLOM, P.C., an Oregon professional corporation, having a place of business at 1030 S.W. Morrison Street, Portland, Oregon 97205, acquired the rights above-described U.S. patent application Serial No. 09/174,057 for TIGHTLY COUPLED AND SCALABLE MEMORY AND EXECUTION UNIT ARCHITECTURE, among other US patent/ applications by virtue of the Sheriff's Certificate of Sale of Personal Property, issued by the Sheriff'coroner of County of Santa Cruz, California, Sheriff's File No. 03-11763, said Certificate of Sale recorded in Reel/Frame 013887/0798 (2 pages), on August 21, 2003 (copy enclosed), pursuant to the Writ of Execution issued by the Superior Court, Santa Cruz County, California, on April 30, 2003 on a judgment entered in Court Case No. CV 139759, on March 1, 2001, said Judgment and Writ recorded in Reel/Frame 011390/0727 (19 pages) on March 15, 2001.

The entire delay in filing the required reply/fee from the due date for the required reply until filing of a grantable petition under 37 CFR 1.137(b) was unintentional.

MANNER OF PAYMENT

Enclosed is PTO Form 2038 authorizing credit card payment for the above-listed fees. Any deficiency or overpayment should be charged or credited to deposit account number 13-1703.

20575

Customer No.

Respectfully submitted,

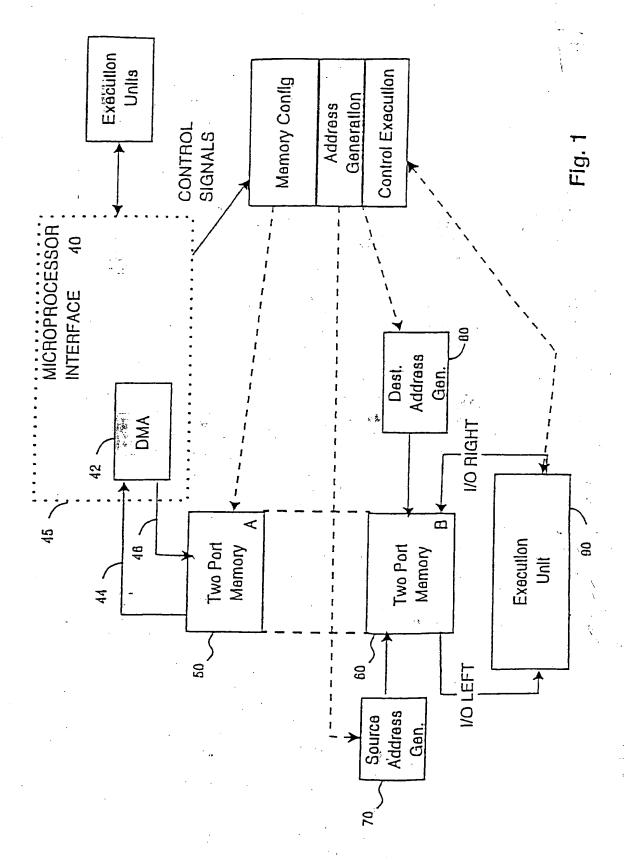
MARGER JOHNSON & McCQLLOM, P.C.

Alexander C. Johnson, Jr.

Registration No. 29,396

Marger Johnson & McCollom, P.C. 1030 S.W. Morrison Street

Portland, Oregon 97205 Telephone: (503) 222-3613 Inventors: Brent Lebeck et al
or: A Tightly Coupled and Scalable Memory and Execution Unit Architecture
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Inventors: Brent Lebeck et al

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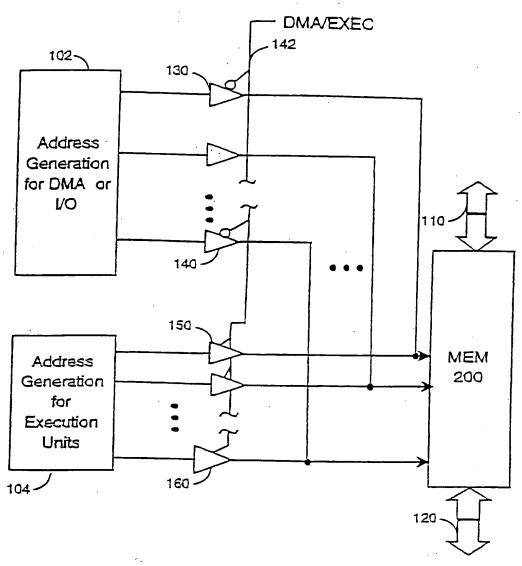


FIG. 2

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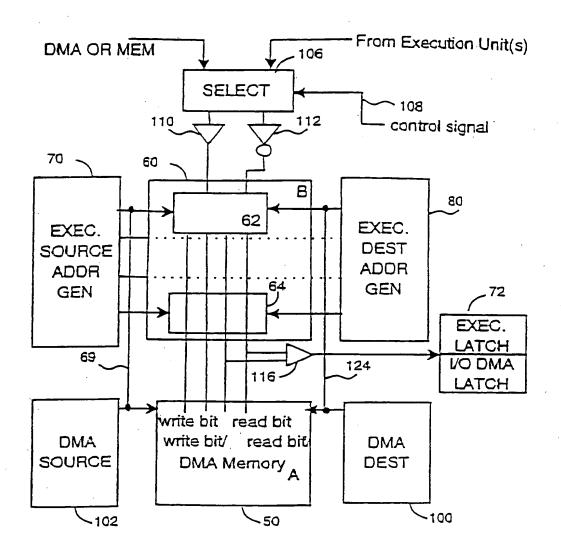
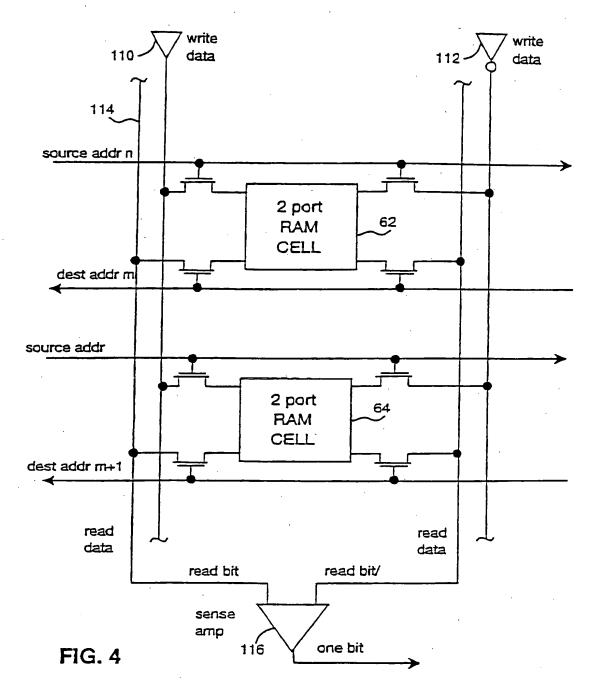
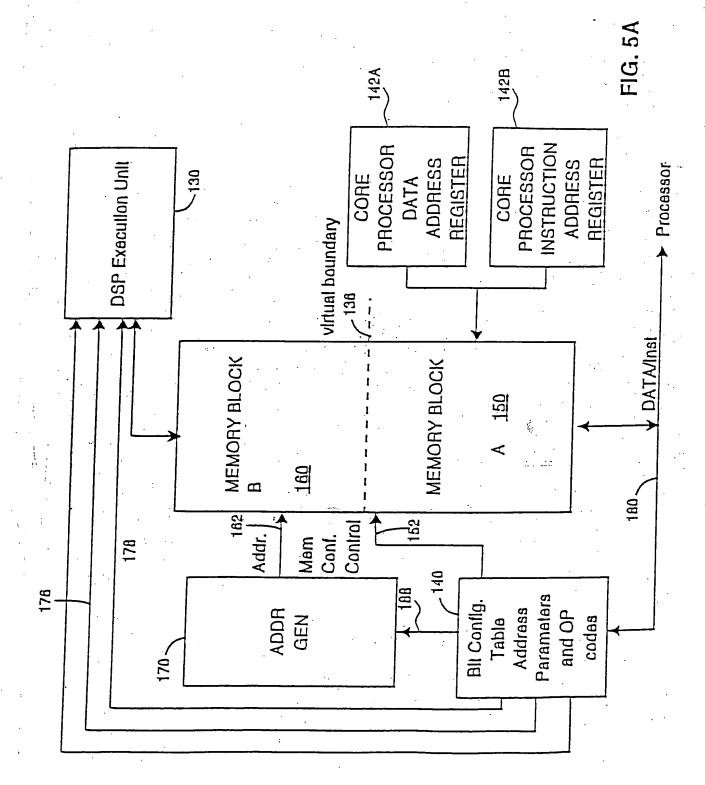


Fig. 3

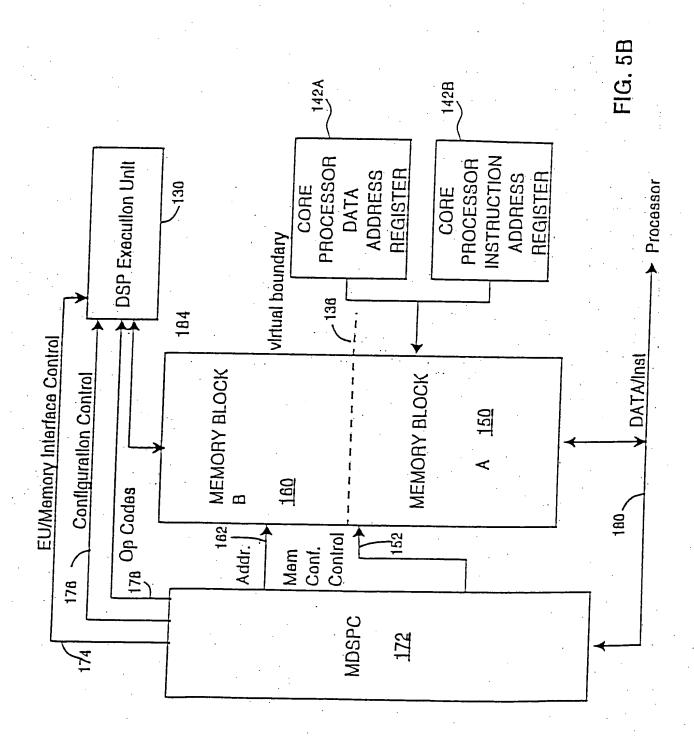




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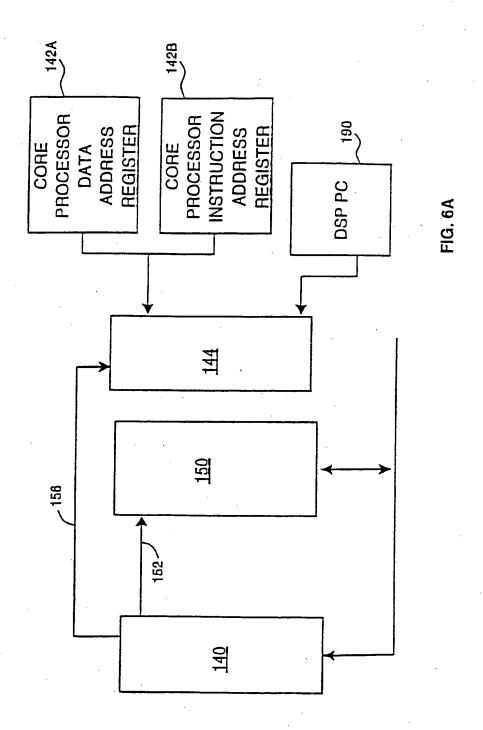
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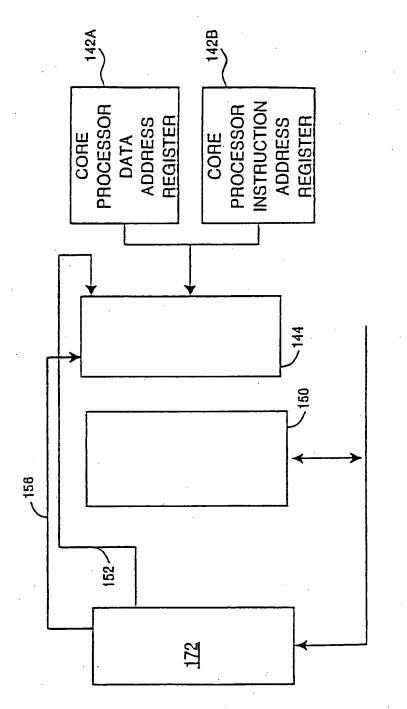
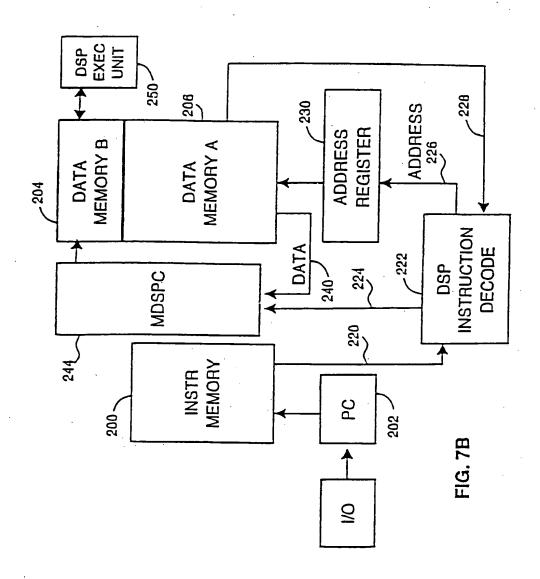


FIG. 6B

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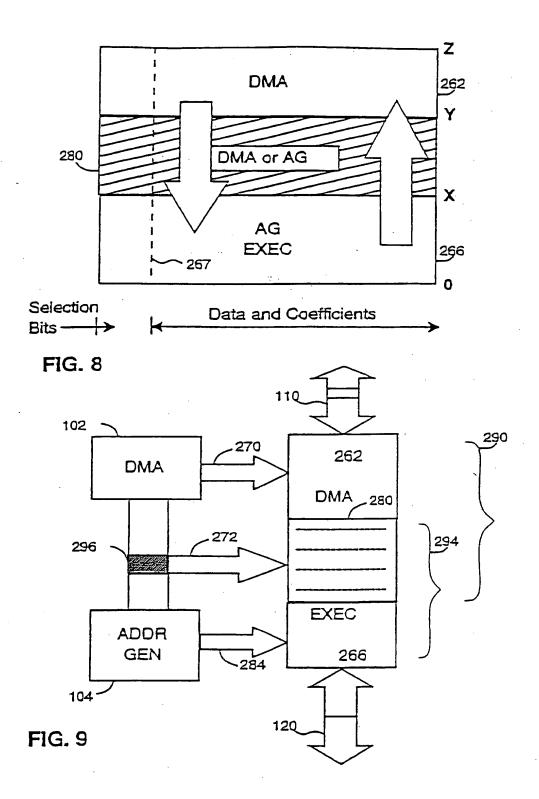
DSP EXEC UNIT 250 228 ADDRESS 226 ADDRESS REGISTER DATA MEMORY A MEMORY B DATA DSP INSTRUCTION DATA DECODE **TABLES** 240/ ETC. BIT AG 520 INSTR MEMORY <u>P</u> 202 FIG. 7A 9

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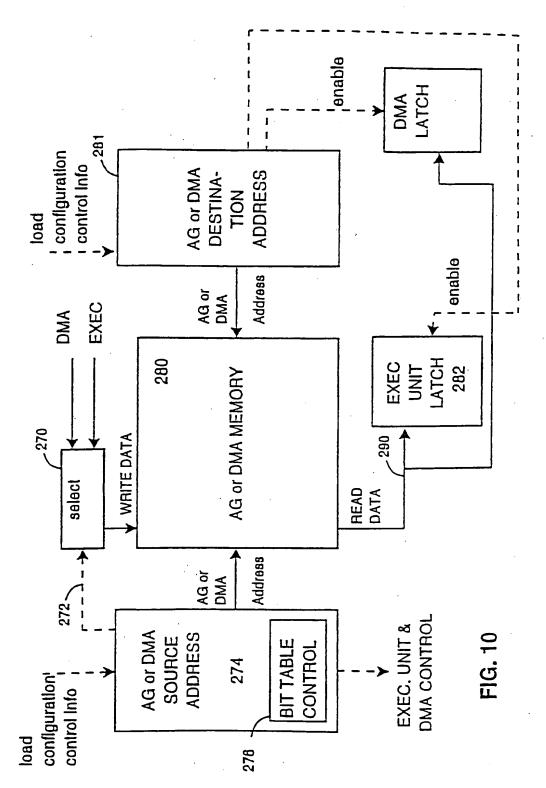




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For: A Tightly Coupled and Scalable Memory and Execution Unit Architecture
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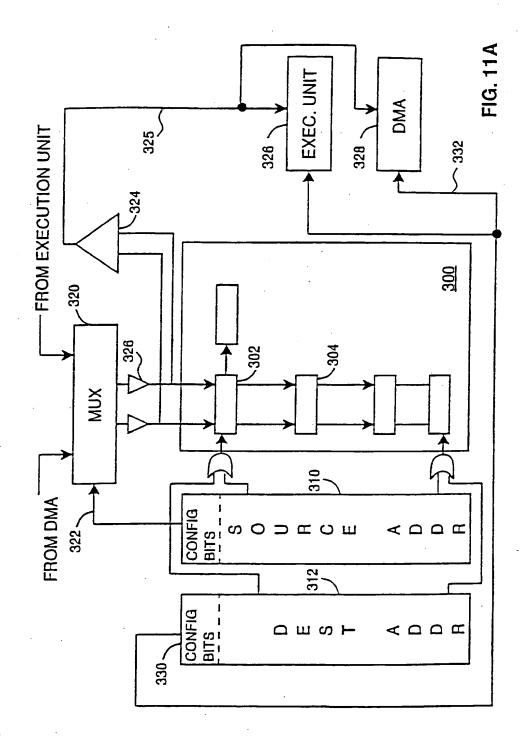


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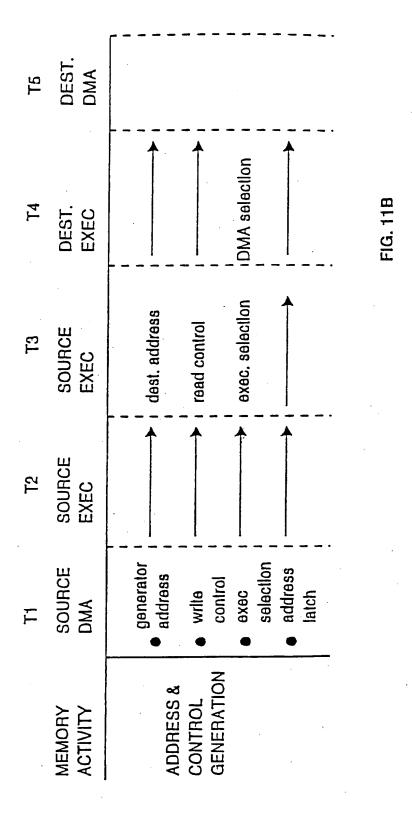
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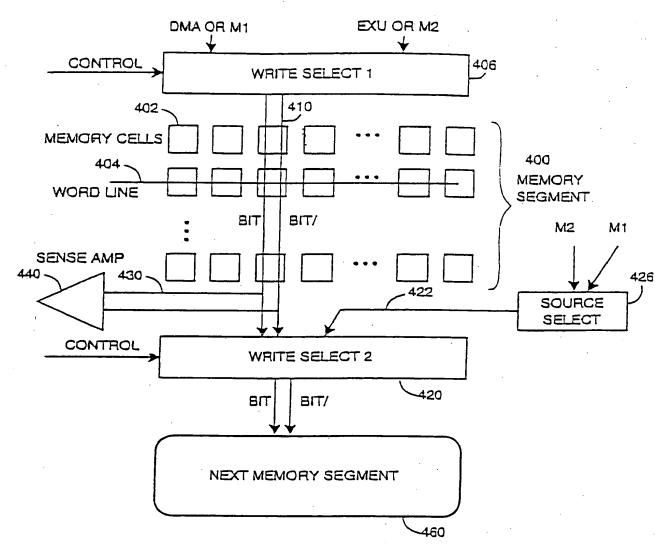
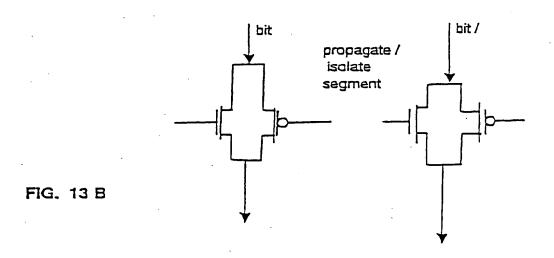


FIG. 12

Inventors: Brent Lebeck et al For: A Tightly Coupled and Scalable Memory and Execution Unit Architecture Serial No. 09/174,057 filed on October 16, 1998 Our Doct No. 8075-020 Page 17 of 42

406 sense amp memory segment 410 466 select M1 bit 1, M1 TO OTHER COLUMNS 462 bit 1/ M1 select M1 next memory segment 460 select M2 bit 1, M2 464 FIG. 13 A bit 1/, M2 select M2



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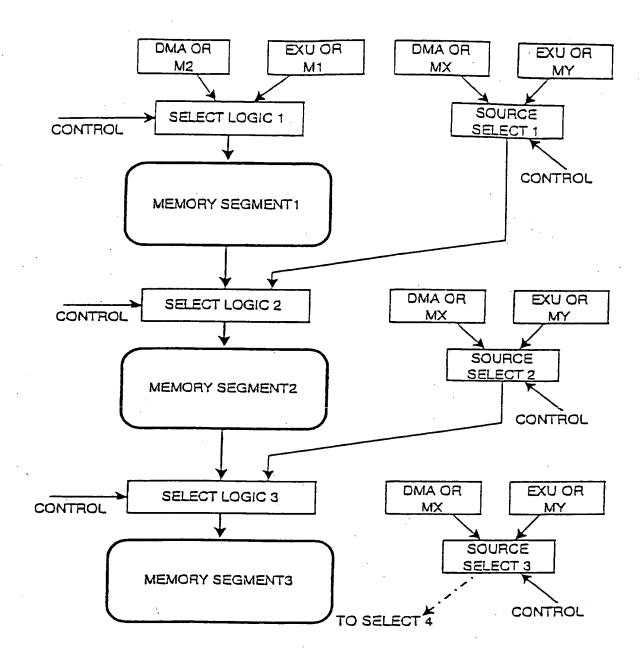


FIG. 14



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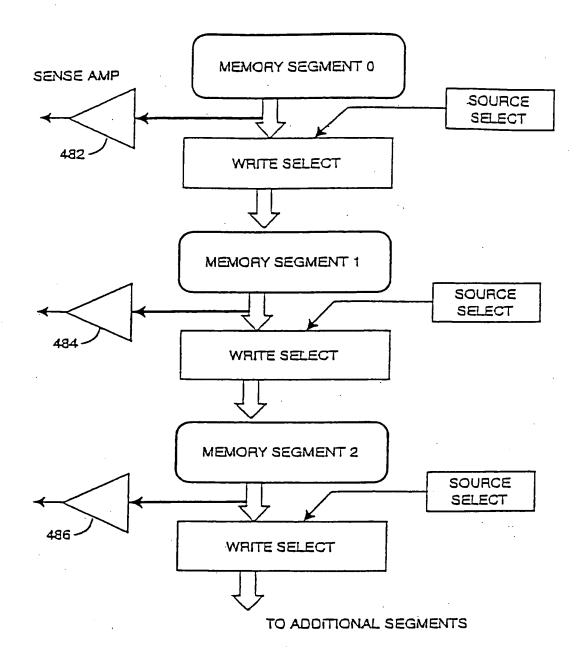
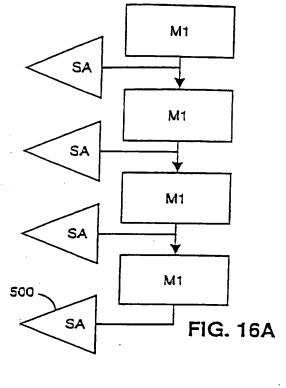
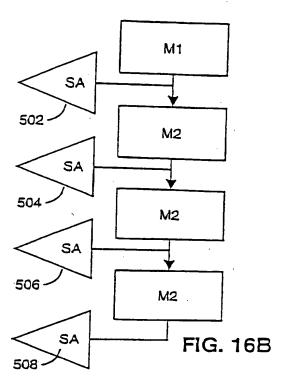
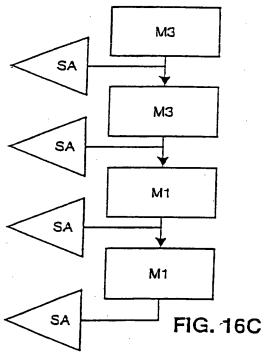


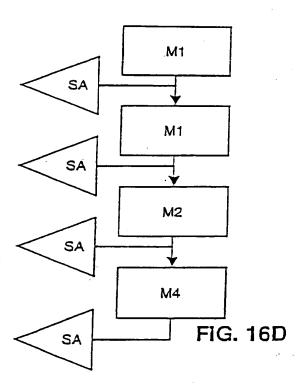
FIG. 15

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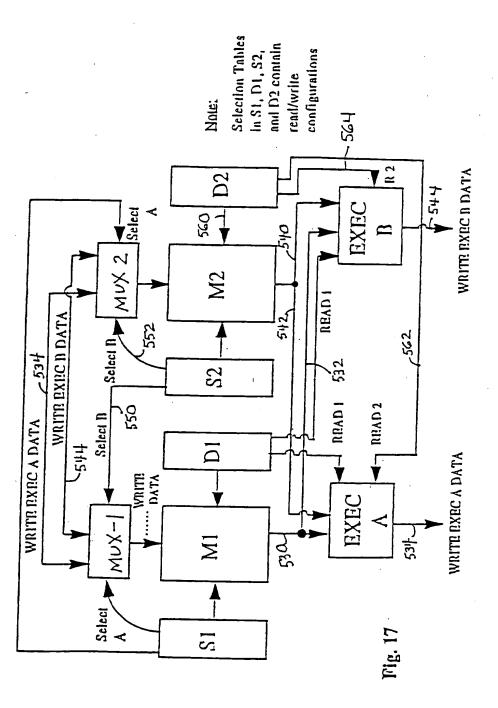






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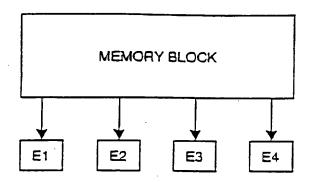


FIG. 18A

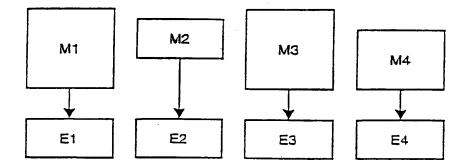


FIG. 18B

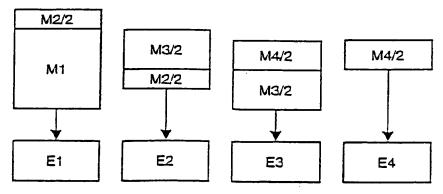


FIG. 18C

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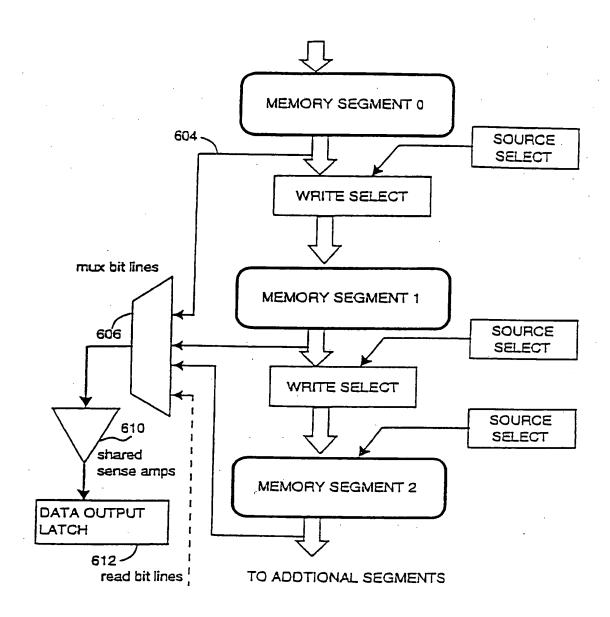


FIG. 19

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For: A Tightly Coupled and Scalable Memory and Execution Unit Architecture
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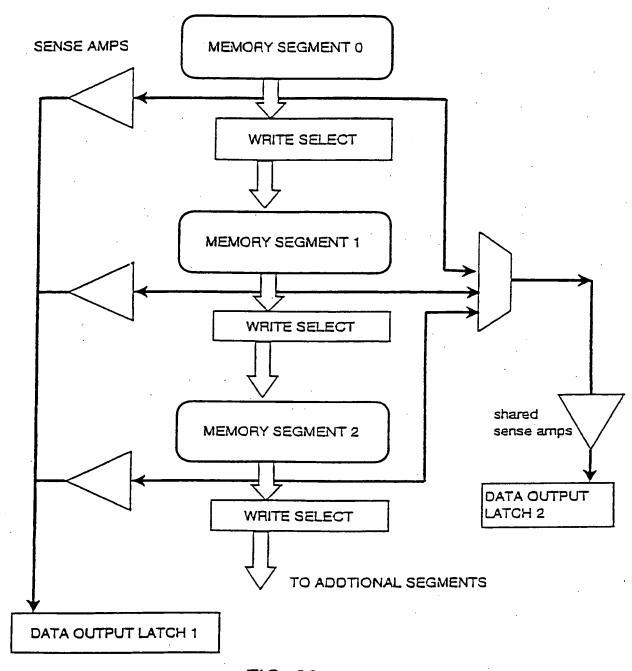
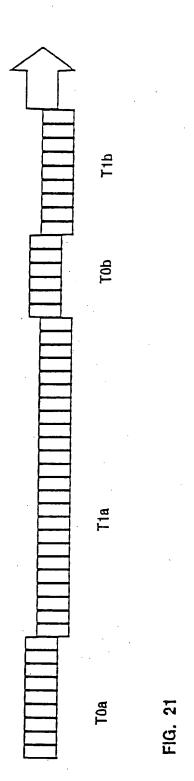


FIG. 20



Inventors: Brent Lebeck et al

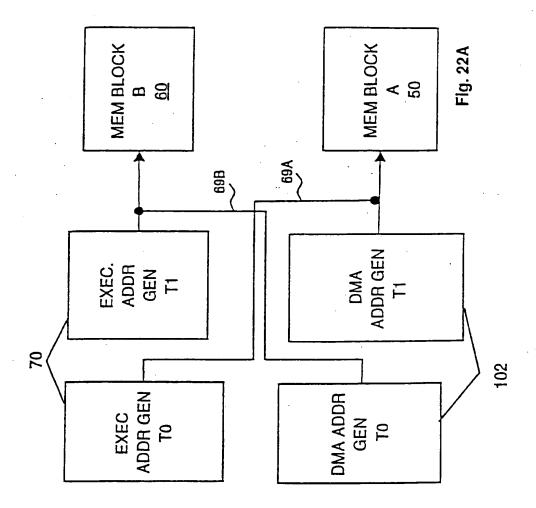
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Inventors: Brent Lebeck et al

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For: A Tightly Coupled and Scalable Memory and Execution Unit Architecture

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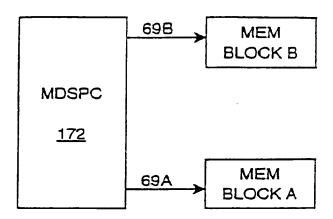


FIG. 22B

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Inventors: Brent Lebeck et al

For: A Tightly Coupled and Scalable Memory and Execution Unit Architecture

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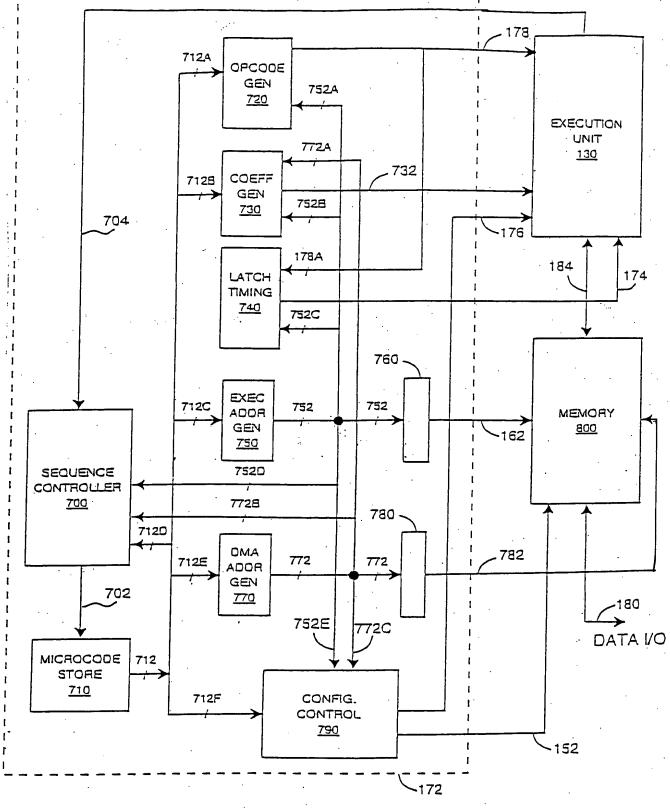


FIG. 23A

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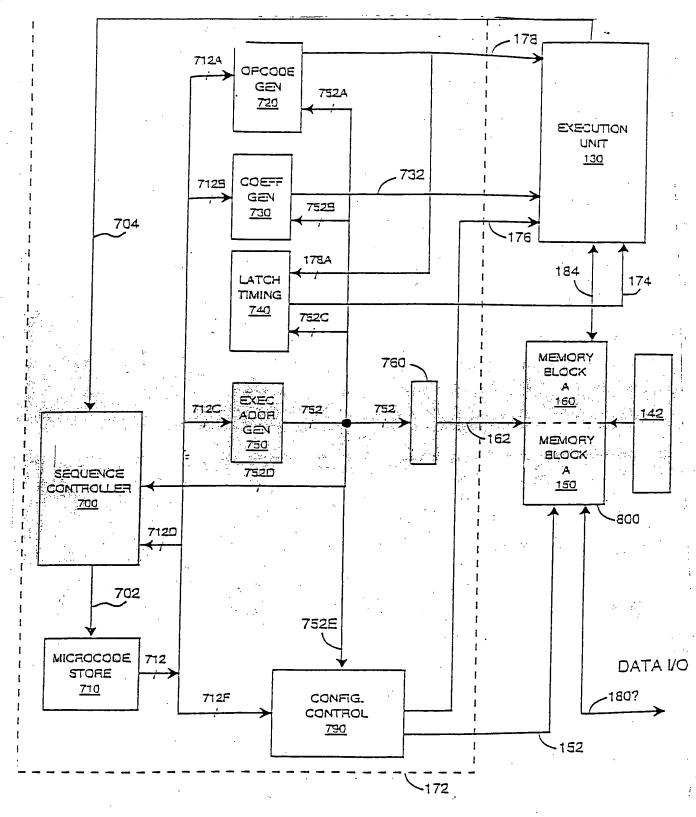


FIG. 23B

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Page 30 of 42 178 712A OPCODE GEN 752A <u>720</u> EXECUTION UNIT 7724 130 787A 732 COEFF 7128 GEN 7528 730 704 178A 184 LATCH TIMING <u>740</u> 752C MEM BLK 760. 160 EXEC 712C 752 752 ADDR MEM BLK GEN 162 <u>750</u> 7520 150 7728 SEQUENCE 7878 CONTROLLER MEM BLK C 780. <u> 190</u> <u>700</u> 772 772 DMA 7120 ADOR 712E GEN ı -782 770 785 180A 1 702 787 787 1 DMA 712G 1808 ADDR GEN

-789

152

-172

DMA

PORT 1

DMA

PORT 2

FIG. 23C

CONFIG.

CONTROL

<u>790</u>

775

712F

MICROCODE

STORE 710

712



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	ADORESS	FUNCTION
	0×710	FFT RADIX 2
	0x905	FIR FILTER
	0x2100	CONVOLUTION
L		

FIG. 24A

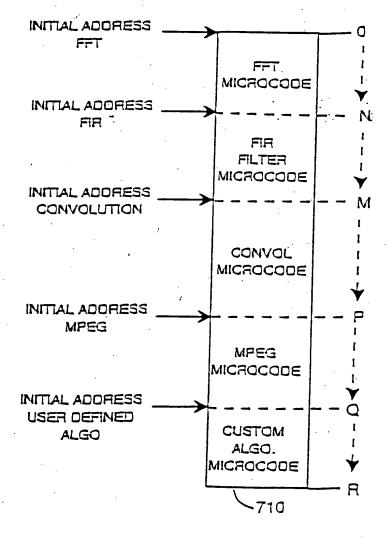


FIG. 24B



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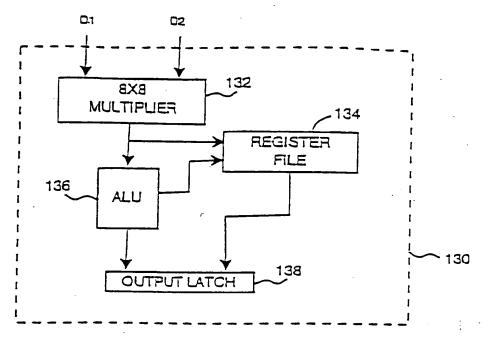


FIG. 25

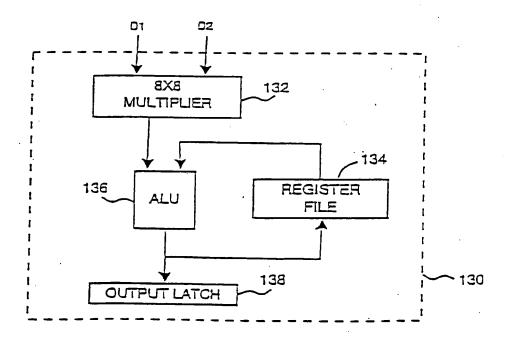
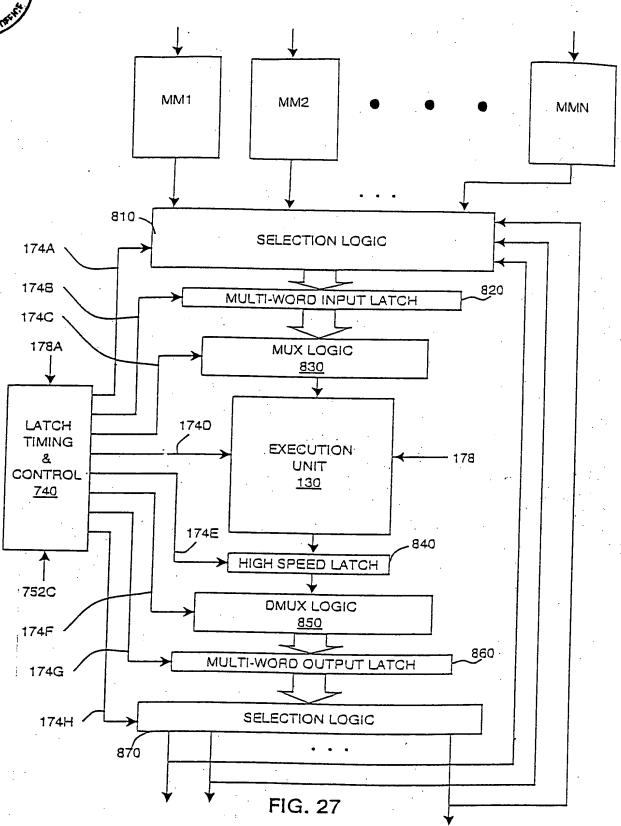


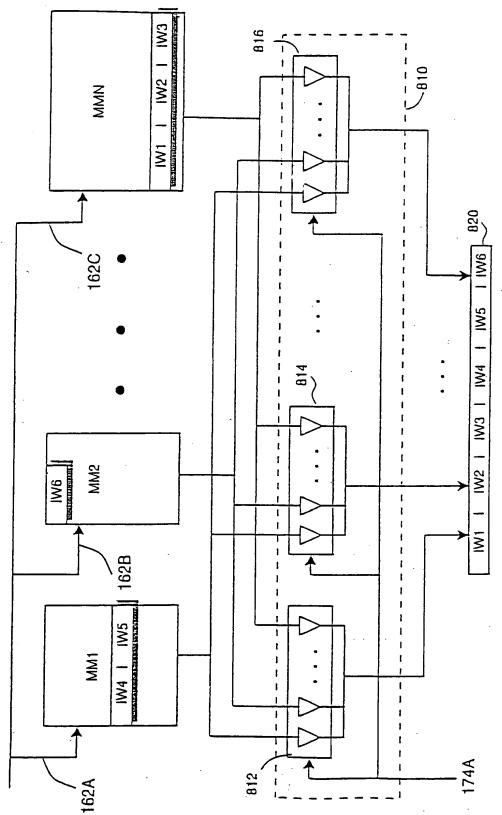
FIG. 26

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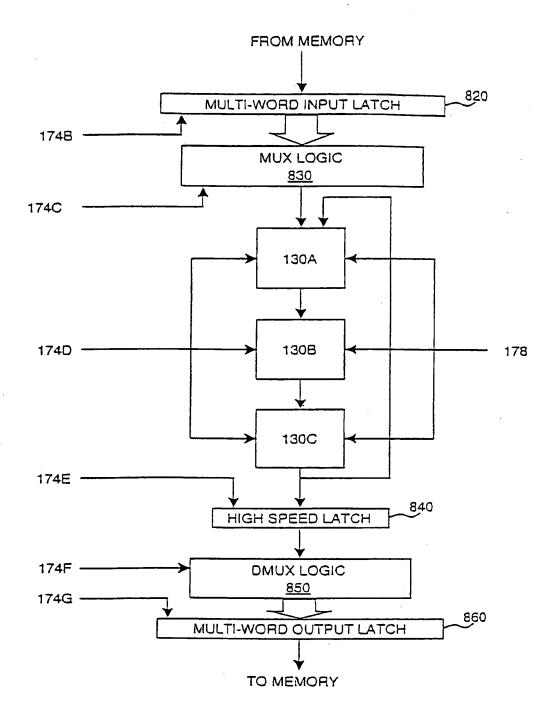
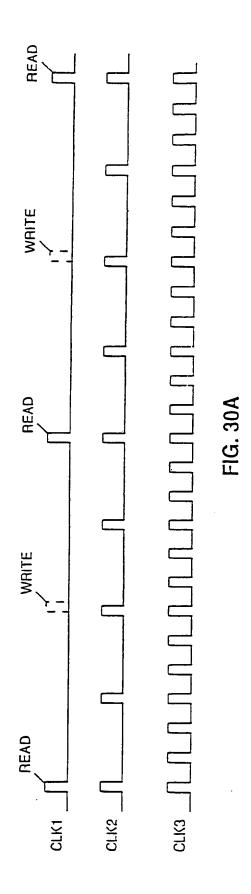
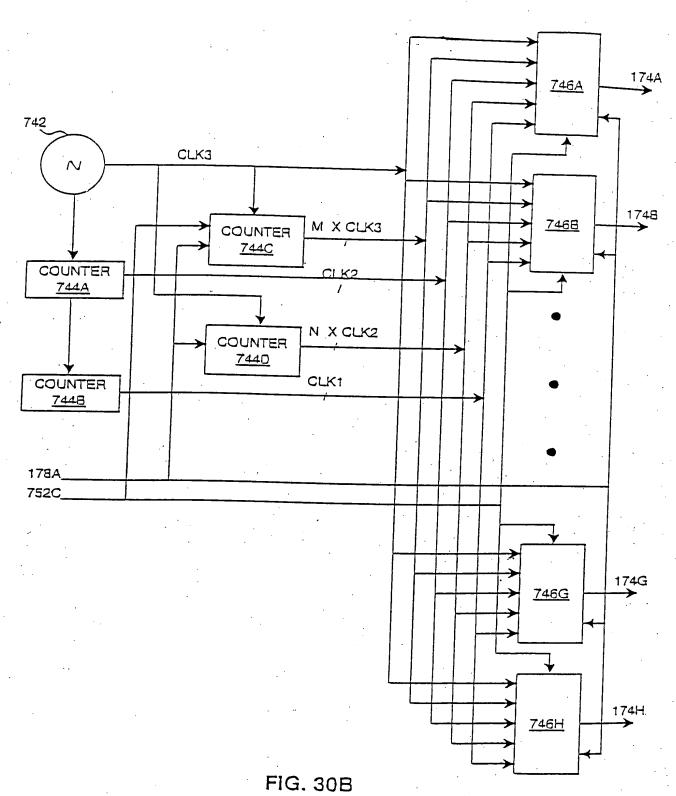


FIG. 29





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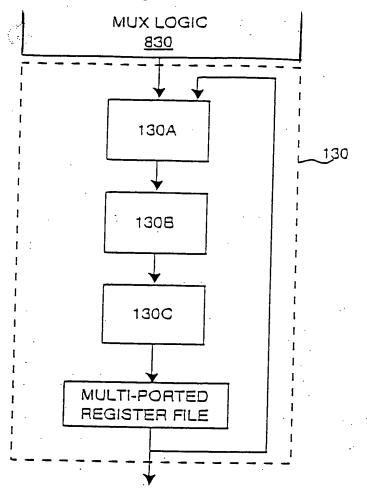


FIG. 31

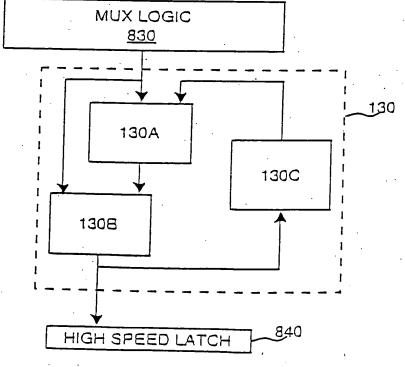


FIG. 32



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For: A Tightly Coupled and Scalable Memory and Execution Unit Architecture
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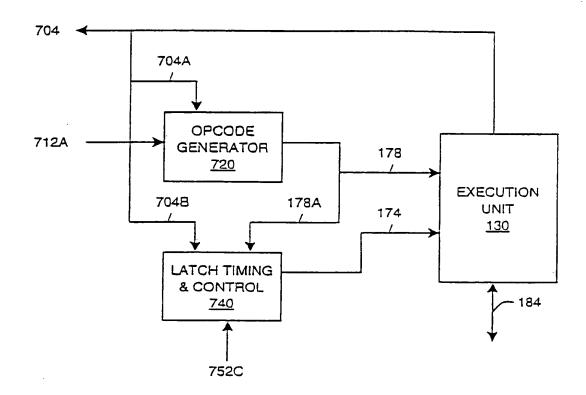


FIG. 33

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For: A Tightly Coupled and Scalable Memory and Execution Unit Architecture
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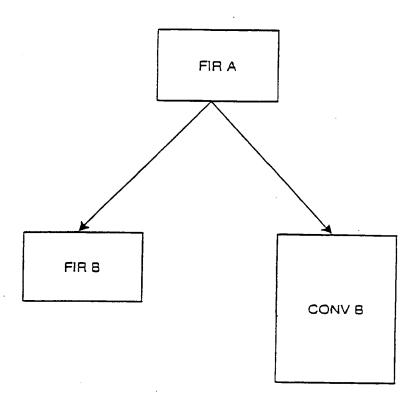


FIG. 34



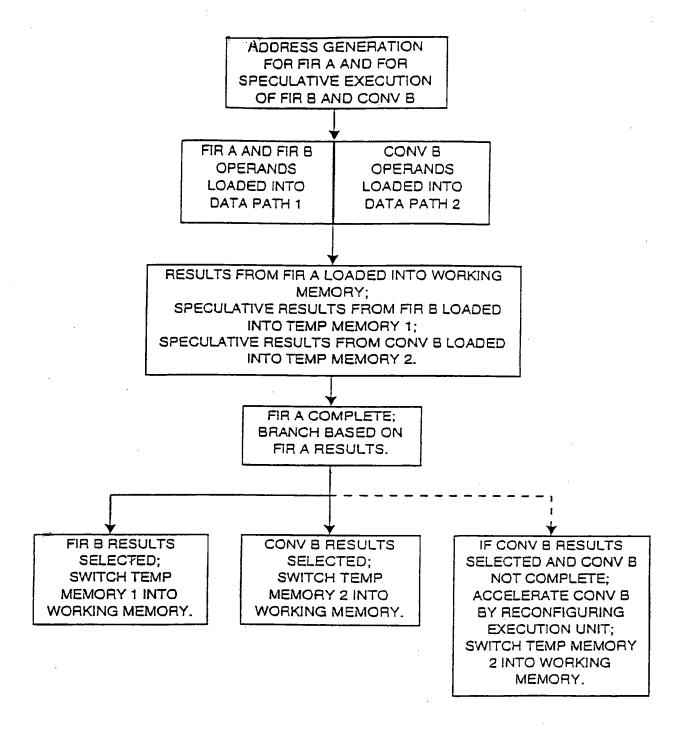


FIG. 35



Inventors: Brent LeBeck et al
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	WORKING MEMORY
	TEMP MEMORY 1
! ! !	TEMP MEMORY 2
! ! !	•
	•
 ! !	TEMP MEMORY N

FIG. 36